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PATENT

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August 8, 2006
Mita J. Luo
SIGNATURE

08/08/2006
DATE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Yun Luo et al.
Serial No. : 10/785,278
Filing Date : February 24, 2004
For : METHOD AND APPARATUS
FOR ARBITRATING OUTPUTS
FROM MULTIPLE PATTERN
RECOGNITION CLASSIFIERS
Art Unit : 3616
Examiner : TBD
Attorney Docket : TRW(TE)6896

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

1. Pursuant to 37 CFR §1.97 and §1.98, and in compliance with CFR §1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. Applicant(s) make no admission that the documents are prior art to the present invention.
2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a corresponding U.S. Patent is enclosed, or an English abstract, or a concise explanation of the relevance of the document is set forth on an attached sheet.

3. Pursuant to 37 CFR §1.97(b) this Statement is being filed (one must be checked):

- (a) ☐ Within three months of the filing date or date of entry into the National Stage.
- (b) ☒ Before the mailing date of a first Office Action on the merits.
- (c) ☐ After the period set forth in 37 CFR §1.97(b) but before the mailing date of either a final action or a notice of allowance or an action that otherwise closes prosecution in the application.
 - 1) ☐ A certification is given below,
 - 2) ☐ Enclosed is a check covering the fee (\$180.00) set forth in §1.17(p) for consideration of this Statement, or
 - 3) ☐ Charge the fee set forth in 37 CFR §1.17(p) to Deposit Account No. 20-0090.
- (d) ☐ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. The required certification and fee is indicated below.
 - 1) ☐ Enclosed is a check covering the fee set forth in 37 CFR §1.17(p) \$180, or
 - 2) ☐ Charge the fee set forth in 37 CFR §1.17(p) to Deposit Account No. 20-0090.

4. Certification (if applicable):

- (a) ☒ The undersigned hereby certifies that each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.

- (b) ☐ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the undersigned's knowledge after making reasonable inquiry no item of information contained in the Statement, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Statement.
5. The Commissioner is hereby authorized to charge any additional fees, fees underpaid, or credit any overpayment with regard to this Statement to Deposit Account No. 20-0090.
6. Concise Explanation (if needed):
- (1) ☐ Below is a Concise Statement of Relevance of enclosed non-English language document(s).

U.S. PATENT DOCUMENTS

U.S. Patent Application Pub. No. US 2003/0209893 A1

OTHER DOCUMENTS

Phetkaew et al., "Reordering Adaptive Directed Acyclic Graphs: An Improved Algorithm for Multiclass Support Vector Machines", *Journal of Advanced Computational Intelligence and Intelligent Informatics*, Vol. 7, No. 3, 2003, XP002386455.

Lachiche et al., "Improving Accuracy and Cost of Two-Class and Multi-Class Probabilistic Classifiers Using ROC Curves", *International Conference on Machine Learning*, 2003, XP002386456.

Pratt, "Digital Image Processing", 2001, Wiley Interscience, New York, XP002386466.

Tax et al., "Using Two-Class Classifiers for Multiclass Classification", *IEEE Comput. Soc., US*, Vol. 2, 11 August 2002 (2002-08-11) pages 124-127, XP010613836.

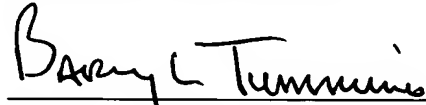
Fürnkranz. "Pairwise Classification as an Ensemble Technique", *IN: European Conference on Machine Learning (ECML)*, 2002, XP002386457.

OTHER DOCUMENTS

Cortes et al., "Support-Vector Networks", *Machine Learning*, Vol. 20, 1995, Pages 273-297, XP002386458.

Otsu. "A Threshold Selection Method from Gray-Level Histograms", *IEEE Transactions on Systems, Man and Cybernetics*, Vol. 9, No. 1, 1979, pages 62-66, XP002386459.

Respectfully submitted,

A handwritten signature in dark ink, reading "Barry L. Tummino". The signature is written in a cursive style with a large initial "B".

Barry L. Tummino
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U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO.: TRW(TE)6896

SERIAL NO. 10/785,278

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use several sheets if necessary)



APPLICANT(S): Yun Luo et al.

FILING DATE: February 24, 2004

GROUP: 3616

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
A	US-2003/0209893 A1	Nov. 13, 2003	Breed et al.			
B						
C						
D						

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER		DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
E							
F							
G							
H							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

I	Phetkaew et al., "Reordering Adaptive Directed Acyclic Graphs: An Improved Algorithm for Multiclass Support Vector Machines", <i>Journal of Advanced Computational Intelligence and Intelligent Informatics</i> , Vol. 7, No. 3, 2003, XP002386455.
J	Lachiche et al., "Improving Accuracy and Cost of Two-Class and Multi-Class Probabilistic Classifiers Using ROC Curves", <i>International Conference on Machine Learning</i> , 2003, XP002386456.
K	Pratt, "Digital Image Processing", 2001, Wiley Interscience, New York, XP002386466.
L	Tax et al., "Using Two-Class Classifiers for Multiclass Classification", <i>IEEE Comput. Soc., US</i> , Vol. 2, 11 August 2002 (2002-08-11) pages 124-127, XP010613836.
M	Fürnkranz. "Pairwise Classification as an Ensemble Technique", <i>IN: European Conference on Machine Learning (ECML)</i> , 2002, XP002386457.
N	Cortes et al., "Support-Vector Networks", <i>Machine Learning</i> , Vol. 20, 1995, Pages 273-297, XP002386458.
O	Otsu. "A Threshold Selection Method from Gray-Level Histograms", <i>IEEE Transactions on Systems, Man and Cybernetics</i> , Vol. 9, No. 1, 1979, pages 62-66, XP002386459.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent applicants' attorney.